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## STUDIES OF PERUVIAN BIRDS. NO. 63 THE HUMMINGBIRD GENERA *OREONYMPHA*, *SCHISTES*, *HELIOTHRYX*, *LODDIGESIA*, *HELIOMASTER*, *RHODOPIS*, *THAUMASTURA*, *CALLIPHLOX*, *MYRTIS*, *MYRMIA*, AND *ACESTRURA*

BY JOHN T. ZIMMER

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Names of colors are capitalized when direct comparison has been made with Ridgway's "Color standards and color nomenclature."

### ***Oreonympha nobilis nobilis* Gould**

*Oreonympha nobilis* GOULD, 1869, Proc. Zool. Soc. London, p. 295—Tinta, Perú; cotypes in British Mus.

Taczanowski (1884, Ornithologie du Pérou, vol. 1, p. 345) gives many of the salient characters of the female plumage of *nobilis*, but his diagnosis is not completely adequate, judging by the specimens in hand. As is the case with many other hummingbirds belonging to species with forked tails, the males have a deeper fork than the females, and even the immature males, although their tails are not so deeply forked as those of adults of the same sex, exceed the females in this respect.

Another character briefly mentioned by Taczanowski is the strong white subterminal band across the gular feathers. It is

present in most of the females at hand, although one example, a young bird, shows only whitish margins on these feathers, but these margins are stronger than in the young males at hand. Young females at first have no bright color on the throat, having the gular feathers brown-centered, but they eventually acquire a limited green gorget, the feathers of which are not so large as the corresponding ones in the males, and in some cases they also develop a few amethystine reddish plumes below the green, again weaker than the beautiful elongate pendant of the males. The general ventral color of the females is duller than that of the males, with the breast less clearly whitish, more clouded. Only one of the females at hand has the dark space on the distal part of the inner web of the outer rectrices more extensive than in any male. This character has been suggested by some authors as a sexual distinction, but it is not substantiated here.

Localities of record from which I have seen no material are Tinta, Chospiyoc, and "Andahuailas" [=Andahuaylillas]. The records from "Huatado" refer to examples from Huatocoto.

### ***Oreonympha nobilis albolimbata* Berlioz**

*Oreonympha nobilis albolimbata* BERLIOZ, 1938 (Jan. 5), Bull. Brit. Ornith. Club, vol. 58, p. 44—Yauli, Huancavelica, central western Perú, about 11,500 feet; ♂; British Mus.

This strongly marked subspecies appears to be even more restricted in its range than *nobilis nobilis*. The three localities where it was discovered (Yauli, Acoria, and Lircay) are all in the Department of Huancavelica.

#### SPECIMENS EXAMINED

*O. n. nobilis*.—

PERÚ:

- Cusco, 1 ♂;
- Urcos, 1 ♀;
- Ollantaytambo, 1 [♀];
- Huaracondo Cañon, 3 ♂, 2 ♀;
- Pisac, 1 ♀;
- Lucre, 4 [♂], 1 "♀?" [=♂], 1 ♀;
- "Huatocto" [=Huatocoto], 1 ♂.

*O. n. albolimbata*.—

PERÚ:

- Lircay, 1 ♂<sup>1</sup>, 1 ♀<sup>1</sup>.

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<sup>1</sup> Specimens in British Museum (Natural History).

### **Schistes geoffroyi geoffroyi** (Bourcier)

*Trochilus Geoffroyi* BOURCIER, 1843 (April), Rev. Zool., vol. 6, p. 101—"la vallée de Caucam près de Carthagène (Nouvelle-Grenade)."

*T[rochilus] Geoffroyi*, BOURCIER AND MULSANT, 1843 (after June 23), Ann. Soc. Sci. Phys. Nat. Agric. Lyon, vol. 6, p. 37, pl. 3—"la vallée de Canca [*sic*], près de Carthagène, dans la Colombie"; *errore*; El Roble, Colombia, suggested by Chapman, 1926, Bull. Amer. Mus. Nat. Hist., vol. 55, p. 322.

It is possible that distinction can be made between Colombian birds, on the one hand, and the Ecuadorian-Peruvian population, but without a satisfactory series of fully adult males I hesitate to do more than point out the characters that may determine such distinction. In the material at hand, the Colombian specimens (almost all of which are "Bogotá"-skins) have the throat deeper or more bluish green than is shown by the birds from Ecuador and Perú, and the lateral pectoral tufts are more reddish or purplish and less bluish. The characters are not constant, however, and I prefer not to suggest subspecific distinction with the evidence at hand.

Other than the material examined, there is one Peruvian record from Paltaypampa, Junín.

It is of interest to record that the specimens which Elliot described as "*Schistes personatus*" [= *S. albogularis*] (1878, Smithsonian Contrib. to Knowledge, no. 317, p. 173), ostensibly from Ecuador as recorded and shown on the labels, prove to be *Augastes scutatus* of which Elliot had at least one other specimen in different plumage. The locality "Ecuador" is, of course, erroneous.

I adopt the name *Schistes geoffroyi chapmani* Berlioz (1941, L'Oiseau et Rev. Française d'Ornith., new ser., vol. 11, p. 235—Roquefalda and Yungas of Cochabamba, Bolivia) for the Bolivian form of this species. As pointed out by Berlioz, the type of *Schistes albogularis bolivianus* Simon (1921, Histoire naturelle des Trochilidae, pp. 213, 388—"Bolivia") obviously does not represent the existing Bolivian population and may be an artifact composed of *albogularis* and *geoffroyi*. The label supplied by Simon in the absence of an original bears the locality "Ecuador" scratched out and with "Bolivia" substituted.

If the specimen is truly an artifact, as could be determined by relaxing it and examining the preparation, the name given to it is, of course, untenable for any actual population, and Berlioz was quite justified in supplying a valid name for the Bolivian popula-

tion previously characterized by Chapman (1926, Bull. Amer. Mus. Nat. Hist., vol. 55, p. 323). One other possibility, however, remains. Todd (1942, Ann. Carnegie Mus., vol. 29, p. 354) recorded an immature specimen from Cumbre de Valencia, northern Venezuela, which appeared to agree with Colombian material in the same state of plumage and was hence identified as *geoffroyi*. The locality is far distant from the nearest locality in the range of *geoffroyi* as otherwise known, and it is quite possible that there is a north-Venezuelan form of the species still to be recognized. The immature plumage might still be exactly like that of *geoffroyi*. It may be found to have the characters ascribed to "*bolivianus*," in which case that name, however inappropriate, will have to be applied to it, unless, of course, the type of "*bolivianus*" can be actually certified as a composite specimen.

#### SPECIMENS EXAMINED

##### *S. g. albogularis*.—

###### COLOMBIA:

(San Antonio, Antioquia, Miraflores east of Palmira, Alto de las Cruces, "Cauca," and Cauca Valley), 2 [♂], 2 ♀, 1 [♀].

###### ECUADOR:

("Gualaquiza" and Guala), 3 ♀.

NO LOCALITY: 1 [♂].

##### *S. g. geoffroyi*.—

###### COLOMBIA:

El Roble, 1 ♂;

"Bogotá" and "New Granada," 13 [?♂], 6 [?♀].

###### ECUADOR:

Río Oyacachi, below Chaco, 4 ♂;

Río Negro Hacienda [Río Pastaza], 1 [♂], 2 [♀];

"Río Napo," 1 [♂];

"Ecuador," 1 ♂.

###### PERÚ:

Chaupe, 2 ♂;

Pozuzo, 1 ♀.

##### *S. g. chapmani*.—

###### BOLIVIA:

Roquefalta, 2 ♂ (cotypes);

Yungas, Cochabamba, 2 ♂ (cotypes).

#### ***Heliothryx aurita aurita* (Gmelin)**

[*Trochilus*] *auritus* GMELIN, 1789, Systema naturae, vol. 1, pt. 2, p. 493—Cayenne.

This subspecies is found only north of the Amazon throughout its range, and Perú offers no exception. An adult male from

Pomará, northern Amazonas, presents the second record from Perú, being preceded by a much earlier one from Pebas. Other early records once assigned to this form certainly belong either to *auriculata* or *phaïnolaema* as is noted below in the discussion of those subspecies.

I consider the violet-capped *barroti* a conspecies of the others. Its only character is the differently colored cap of the adult males, a feature that is paralleled by various other species of hummingbirds. Admittedly I have seen no intermediates among the males. The females are indistinguishable with certainty among themselves, although certain trends exist such as the usually weaker ventral spotting in *barroti* and perhaps *phaïnolaema*. I believe "*Heliothrix aurita major*" Lönnberg and Rendahl (1925, Arkiv för Zool., vol. 14, no. 25, p. 61—Pisagua [= Piragua], above Babahoyo, western Ecuador) to have been based on a young male of *barroti* in which the violet crown-patch had not yet developed. Its supposedly larger measurements (the only character given by the describers) are matched in various specimens of *aurita* with which form the original comparison was made.

Young birds of both sexes have the rectrices somewhat narrower distally than do the adults, and some of the specimens, especially of the males, in apparently fully adult plumage, still retain the narrower rectrices of the immature dress. If allowance be made for a small number of improperly sexed specimens in the series before me, it appears that young males have the under parts entirely white or with nearly obsolete dusky spots on the breast in some cases, and that the tail is somewhat longer than in adult males, being often as long as that of adult females and sometimes showing dark subbasal spots on the outer three rectrices. Young females, on the other hand, are more prominently spotted on the breast, resembling the adult females in that particular, and have the tail longer even than in adults of their sex, with the subbasal marking broad and bar-like on the outer three pairs, also as in adults.

Irregularities undoubtedly occur, and not every specimen is easily assigned to its proper position on the basis of these characters which, however, appear to be the standards in all the subspecies.

### ***Heliothrix aurita auriculata* (Nordmann)**

*Tr[ochilus] auriculatus* NORDMANN, 1935, in Erman, Reise um die Erde, Naturhistorischer Atlas, p. 5, pl. 2, figs. 1, 2—no locality = Rio de Janeiro, Brazil; Berlin Mus.

? *O[rnismya] Pouchetii* LESSON, 1840, Rev. Zool., vol. 3, p. 72—"Caïenne; quelques uns disent Rio-Janeiro et M. Parzudaki dit Monte-Video"; probably Baía, Brazil.

As noted under *H. a. phaïnolaema*, an adult male from Tulumayo is indistinguishable from Baía specimens of *auriculata*, agreeing with the determination made by Berlepsch and Stolzmann (1902, Proc. Zool. Soc. London, vol. 2, p. 28) of an adult male (and a young one) from La Merced, in the same region. Nevertheless, I hesitate to make this assignment because of the isolation of the Peruvian locality and because certain other specimens at hand from other localities (not in Perú but similarly disruptive) that have been recorded as *auriculata* are, to the best of my belief, *phaïnolaema*. Both identifications are open to the possibility that the birds in question are no more than intermediates between *phaïnolaema* and *aurita*, as is discussed more fully under *phaïnolaema*.

The recognition of "*pouchetii*" is problematical. Jouanin (1948, L'Oiseau et Rev. Française d'Ornith., vol. 18, p. 111) relegated it to a position of strict intermediacy between *auriculata* and *phaïnolaema*. He found it too variable to stand as a distinct subspecies. In the absence of material from definite localities, I accept his disposition of the case. Nevertheless, the material at hand separates readily into two series. The adult males of characteristic "Rio" preparation have the white of the throat extending anteriorly in an evenly narrowing angle which comes to a point below the green chin. In adult males of "Bahia-make" the sides of the throat are more broadly green but do not quite meet across the midline of the area, approaching each other rather abruptly just above the breast and then paralleling each other in the forward direction, leaving a narrow stripe of white in the center of the throat. This white stripe is sometimes much reduced in width and sometimes in length or both, showing a definitely variable approach toward *phaïnolaema* without reaching its full gular characteristic. These trade-skins appear to show a definite segregation of forms, but until specimens from certainly known localities are available, "*pouchetii*" may best be left in synonymy. Its intermediate character is unquestionable.

The relevancy of this discussion hinges on the Peruvian specimen from Tulumayo which has the throat more like that of "*pouchetii*" than that of the "Rio-skins" although not at the strongest development. If "*pouchetii*" should be recognized as distinct, the Tulumayo bird could be referred to it.

### ***Heliothryx aurita phainolaema* Gould**

*Heliothrix phainolaema* GOULD, 1855, Proc. Zool. Soc. London, pt. 23, p. 87—"Rio Napo"; *errore* = Pará, Brazil; British Mus.

*Phainolaema* is distinguishable from *auriculata* of southeastern Brazil by having, in the adult male plumage, the green of the chin carried over a large part of the throat, forming a broad gular patch instead of the V-shaped pattern exhibited by *auriculata*. In addition, the bill appears to be distinctly longer (17-19.5 mm. as against 14.5-17) in both sexes, and the adult males in most cases have at least a small dusky subbasal spot on one or both webs of the outermost rectrices. One female, said to be a "Rio" specimen, has a bill 18 mm. in length, but it is not a characteristic "Rio-skin" but apparently is from the Baía region where approach to *phainolaema* takes place.

Specimens unhesitatingly referable to this form are at hand from the Rio Tapajoz, Rio Tocantins, and the Pará district of Brazil. An adult male from Astillero, southeastern Perú, is in good agreement, although the spots on the rectrices are not clearly evident, partly, perhaps, because the tail is in molting condition. The gular patch and the long bill are both those of *phainolaema*.

Hellmayr (1910, Novitates Zool., vol. 17, p. 377) recorded a specimen from Calamá, Rio Madeira, Brazil, as *auriculata*, noting that it had a bill longer than usual and a dark bar near the base of the three outer tail-feathers. He described the tail as being that of the immature plumage, but it is in molt, and one of the new white plumes shows the same dark mark as the others. Also, the throat is still in molt, and some of the new green feathers are in a position to indicate the final pattern would be that of *phainolaema* to which I refer the specimen.

The specimen from Chifñiri, Bolivia, recorded as *auriculata* by Bond and de Schauensee (1943, Proc. Acad. Nat. Sci. Philadelphia, vol. 95, p. 209) is in much the same stage of development as the Calamá bird and shows the same distinguishing marks of *phainolaema*. Gyldenstolpe (1945, K. Svenska Vetenskapsakad. Handl., ser. 3, vol. 23, no. 1, p. 107) reported a specimen of *phainolaema* from northern Bolivia which accords with my identification of the Chifñiri specimen. Snethlage (1914, Bol. Mus. Goeldi, vol. 8, p. 202) records *phainolaema* from Cachoeira, Rio Purús, Brazil, but whether on a male or female specimen is not stated. Other examples from Bolivia (Buenavista) and western Brazil (Hyutana-

hán) and São Paulo de Olivença) recorded by Todd (1942, Ann. Carnegie Mus., vol. 29, p. 355) were assigned to *auriculata* on geographical grounds, presumably on the basis of Hellmayr's identification of the Calamá specimen discussed above, but since they were all females, their identity is not certain. I suspect they should be assigned to *phaïnolaema*.

Hellmayr again (1920, Archiv. Naturgesch., 85th year, div. A, vol. 10, p. 118), reported an adult male of *auriculata* from Yahuarmayo, southeastern Perú, which is disturbing in view of the specimen of *phaïnolaema* before me from Astillero. The localities are so close together that the existence of two forms, one at each place, is difficult to credit. Hellmayr notes his bird as being exactly identical with southeast-Brazilian specimens, but he gives the length of bill as 18.5 mm. which agrees better with the measurement of *phaïnolaema* than with that of *auriculata*. A female at hand from Cosñipata, southeastern Perú, is otherwise unidentifiable as between the two forms, but has the bill 18.5 mm. in length, indicating identity as *phaïnolaema*. Yahuarmayo lies between Cosñipata and Astillero! It is quite possible that the Yahuarmayo bird was in a stage of development not easily recognizable as transitory, as witness the identification of the Calamá specimen. I have some males of *phaïnolaema* from the lower Amazon, each of which has only a single glittering green gular feather to distinguish it from males of *aurita aurita*, and it would be impossible to separate these specimens from young males of *auriculata* if the bill length is not a valid criterion. They are identifiable in this case by their localities of origin.

On the other hand, I have a male in fully adult plumage from Tulumayo, in the Chanchamayo Valley of central Perú, that is, as Hellmayr reported for his Yahuarmayo bird, indistinguishable from southeast-Brazilian specimens of *auriculata*. This bird is fully adult, with no trace of molt in any part of the plumage, without dark spots on the outer rectrices, but with a bill of only 16 mm. length. The central white stripe of the throat is relatively narrow as in the "*pouchetii*" pattern shown by Baía birds, but it is a definite median stripe and not the semblance of one that can be produced by parting the feathers in the median line of the throat in some specimens of *phaïnolaema* and exposing the white margins and bases of the feathers. If "*pouchetii*" were to be recognized as a subspecies, the male from Tulumayo would be assignable to it. I cannot say if Berlepsch and Stolzmann's bird was closer to typical *auriculata*.



This leaves open the identity of other Peruvian records. One such record is of a supposed pair from Huambo, northern Perú, recorded by Taczanowski (1882, Proc. Zool. Soc. London, p. 37) as "*auritus*." Judging by the description of the male, given by Taczanowski in the "*Ornithologie du Pérou*" (1884, vol. 1, p. 363), it was a young bird and hence it cannot be subspecifically identified from the description except that it had the long bill of *phainolaema*. (Taczanowski's measurements of the bill appear to have been from gape to tip; in this case, 24.5 mm.) My only specimen from northern Perú (south of the Marañón) is a young male from the Río Seco, near Moyobamba, indeterminable as to subspecies; although it does not have a long bill (16 mm.), that member is not fully developed.

Bartlett obtained a specimen at Cashiboya on the Ucayali which Sclater and Salvin (1873, Proc. Zool. Soc. London, p. 288) recorded as "*auritus*." The sex was not noted, and the present repository of the specimen is unknown to me. Berlepsch and Stolzmann (1906, *Ornis*, vol. 13, p. 120) recorded a young bird of unknown sex from Río Cadena, southeastern Perú, as "*auriculatus*," basing the tentative determination on the central-Peruvian specimen (La Merced) they had earlier (1902, Proc. Zool. Soc. London, vol. 2, p. 28) assigned to that form.

It is thus evident that the majority of specimens from critical areas outside the limited east-Brazilian ranges of *auriculata* and *phainolaema* are females or young birds. Nevertheless, the only specimen I have seen that is disruptive in its implications is the male from Tulumayo, Perú. Adult and nearly adult males otherwise, as far as I have examined the material, indicate the range of *phainolaema* to extend over the entire Amazonian basin south of that river, including southeastern Perú, Bolivia, and western Brazil.

One possible explanation remains of the situation in Perú. It has been concluded by Jouanin (1948, *L'Oiseau et Rev. Française d'Ornith.*, vol. 18, p. 111) that "*pouchetii*" does not deserve recognition as a separate subspecies in view of its variability and its positive intermediacy between *auriculata* and *phainolaema*. The Tulumayo specimen may thus be a similar intermediate between *phainolaema* and *aurita*. Hellmayr's Yahuarmayo specimen could be of the same nature. If such is the case, most of the Peruvian population (south of the Marañón) would represent the intermediate stage, with irregular trends in one direction or

the other. Until adequate series of adult males from various parts of the country are available, it will be impossible to define the ranges with more certainty.

In the meantime, I must identify the Tulumayo specimen and a young bird from the same part of the country as *auriculata*, the Astillero male, and, with a query, the Cosñipata female as *phaïnolaema*, and the Río Seco specimen as indeterminate, and leave the Huambo, Cashiboya, and Río Cadena records also indeterminate. Without proof to the contrary, the Yahuarmayo record can be left as originally determined, as *auriculata*, but with a query because of the proximity of my Astillero example of *phaïnolaema*. The situation is unsatisfactory but cannot be cleared without more material.

#### SPECIMENS EXAMINED

##### *H. a. barroti*.—

###### GUATEMALA:

Cobán, 1 (?).

###### NICARAGUA:

(Río Grande, Vizagua, Peña Blanca, state of Matagalpa), 2 ♂, 1 ♀, 1 (?).

###### COSTA RICA:

(Aquinare, Carrillo, Bonilla, Pozo Azul, Salamanca, Volcán de Oso, Puerto Jiménez, Cariblanco de Sarapiquí, and Reventazón), 7 ♂, 6 ♀, 1 (?).

###### PANAMÁ:

(Almirante, Río Calovevora, Boquete, Tapalisa, Tacarcuna, Lion Hill, Barro Colorado Island, Chiriquí, El Real, Santa Fé, and Sevilla Island), 9 ♂, 3 [♂], 5 ♀, 1 [♀], 1 (?).

###### COLOMBIA:

(Chocó, San José, Barbacoas, Noanamá, and "Bogotá"), 6 ♂, 2 [♂], 2 ♀, 1 (?).

###### ECUADOR:

(Río de Oro, Esmeraldas, San Javier, Paramba, Chimbo, and Río Pullango), 6 ♂, 7 ♀, 1 (?).

NO LOCALITY: 1 ♀.

##### *H. a. aurita*.—

###### COLOMBIA:

"Bogotá," 1 ♀;

Río Huaynia, junction with the Casiquiare, 1 ♂;

Maipures, 1 ♂.

###### VENEZUELA:

(Suapure, La Prisión, Tembladera, El Llagual, [western] foot of Mt. Duida, Caño Seco, Solano, Buena Vista, opposite El Meroy), 4 ♂, 11 ♀, 1 "♂" [= ♀], 1 "♀" [= ♂], 2 (?).

###### BRITISH GUIANA:

(Upper Mazaruni River and Mines District), 3 ♂, 2 ♀.

###### CAYENNE:

Pied Saut, 1 ♂, 1 ♀.

## SURINAM:

"Interior," 1 "♀" [= ♂].

## BRAZIL:

(Tatú, Iauarete, and Faro), 4 ♂, 2 ♀ ;

"Brazil," 3 ♂.

## ECUADOR:

(Below San José, Río Suno above Avila, Zamora, and "Napo"), 6 ♂, 6 ♀ ;  
Macal, 1 ♂<sup>1</sup>.

## PERÚ:

Pomará, 1 ♂ ;

Headwaters of Marañón, 1 ♀ <sup>2</sup>.

*H. a. phaïnolaema*.—

## BRAZIL:

(Utinga, Igarapé Assú, Prata, Mocajuba, Baião, Tauary, and Caxiricatuba),  
8 ♂, 1 "♂" [= ♀ ], 1 ♀ ;

Calamá, 1 ♂ ;

Rosarinho, Rio Madeira, 1 ♀ <sup>2</sup>;

Teodoro River, 1 ♀ <sup>2</sup>.

## BOLIVIA:

Chañiri, Río Kaka, 1 ♂<sup>1</sup>.

## PERÚ:

Astillero, 1 ♂ ;

Cosñipata, 1 ♀ <sup>2</sup>.

*H. a. auriculata*.—

## BRAZIL:

"Rio-skins," 6 [♂], 1 [♀] ;

"Bahia-skins," 6 [♂], 1 [♀] ;

"Rio de Janeiro" [?= "Bahia-skins"], 2 ♀ ;

"Brazil," 2 [♂].

## PERÚ:

Tulumayo, 1 ♂ ;

La Merced, 1 "♂" [= ♀ imm.];

Río Seco, 1 "♂" [= ♀ imm.]<sup>2</sup>.

***Loddigesia mirabilis* (Bourcier)**

*Troch[ilus] mirabilis* BOURCIER, 1847, Proc. Zool. Soc. London, pt. 15, p. 42—Chachapoyas, Perú; ♂ ; Loddiges Collection, now in British Mus.

Chachapoyas, 2 ♂, 1 ♀ ; Levanto, 2 ♂, 1 ♀ ; San Pedro, 11 ♂, 7 ♀ .

Much has been written about this curious species by Taczanowski and Stolzmann (1881, Proc. Zool. Soc. London, pp. 827–834). In this account, several different styles of plumage in the young males are described, to which I can add a fourth. One young male at hand has the head and body almost completely immature, with the throat light green without any bluish tinge

<sup>1</sup> Specimens in Academy of Natural Sciences of Philadelphia.

<sup>2</sup> Subspecific identification not certain.

and the top of the head dull bronzy green with only a single blue feather showing on the occiput. The tail, however, is that of an adult male, although the two slender, attenuated under tail-coverts are no longer than those in other immature males in which they are accompanied by rectrices resembling those of the female plumage.

Additional records are from Tamiapampa, Osmal, and Leimebamba. All known localities are in the Chachapoyas region, on the eastern side of the valley of the Río Utcubamba, to which the species appears to be restricted.

***Heliomaster longirostris longirostris* (Audebert and Vieillot)**

*Trochilus longirostris* AUDEBERT AND VIEILLOT, 1801, Oiseaux Dorés, vol. 1, p. 128, pl. 56—West Indies = Trinidad.

Iquitos, 1 ♀; Puerto Indiana, 2 ♂, 2 ♀; "Upper Amazon," 1 [♂]; Yarinacocha, Río Ucayali, 1 ♂, 1 (?); Santa Rosa, 1 ♀.

A series of over 200 specimens from most parts of the known range of the species shows only one unquestionable subspecies that can be distinguished from the typical form. *H. l. albicrissa* of western Ecuador and northwestern Perú is readily distinguished, but the other various proposed subspecies (*pallidiceps*, *sclateri*, *veraguensis*, *stuartae*, *chalcura*, *caeruleiceps*, and probably *sotara*) are of doubtful validity. Some of them have long been considered as valueless, but others have been revived from time to time, only to be discarded in the next treatment. None has been described from Perú. The species is so variable that the various characters used in the proposals for separation of the different populations can be found elsewhere in the general series, perhaps in somewhat different degree or prevalence but sufficiently commonly to break down the geographical import and prevent satisfactory identifications. It seems best, therefore, except in the case of *albicrissa*, to accept *longirostris longirostris* as indivisible.

The range of the typical form appears to be curiously interrupted but may not be so in reality, and future field work may show it to exist in various places from which it has not yet been reported. As an example, a specimen is at hand from Santa Isabel, Rio Negro, Brazil, apparently the first to have been found on the whole course of that stream.

Additional Peruvian records are from Chayavitas, Chamicuros, Yurimaguas, Pebas, and Rioja.

***Heliomaster longirostris albicrissa* Gould**

*Heliomaster albicrissa* GOULD, 1871, Proc. Zool. Soc. London, p. 504—Citado, Ecuador; ♂; British Mus.

Paletillas, 3 ♂, 2 ♀; Seques, 1 ♀; Huarandosa, 4 ♂, 2 ♀; Perico, 1 ♂; "Perú," 1 (?).

The present form, compared with *l. longirostris*, is readily recognized by the more extensive white tips on the under tail-coverts, with the dark bases usually concealed. Other characters are less positive.

This form, as has been on record for many years, crosses the Western Andes from the Pacific side to the Chinchipe Valley of Perú, in the Marañón drainage, with the added probability, pointed out by Chapman (1926, Bull. Amer. Mus. Nat. Hist., vol. 55, p. 324) that an old record from Zamora, southeastern Ecuador, belongs also to *albicrissa*.

Peruvian records are from Lechugal, Paucal, and Nancho. Simon (1921, Histoire naturelle des Trochilidae, p. 392, footnote 8) counted these records as erroneous, but they are fully corroborated by specimens before me from immediately adjacent localities.

**SPECIMENS EXAMINED*****H. l. longirostris*.—**

MÉXICO: 5.

GUATEMALA: 17.

HONDURAS: 12.

NICARAGUA: 7.

COSTA RICA: 16.

PANAMÁ: 23 (including cotype of *veraguensis*).

COLOMBIA: 27 (including type of *stuartae*).

VENEZUELA: 38.

TRINIDAD: 6.

BRAZIL: 3.

ECUADOR: 1.

PERÚ: 9.

BOLIVIA: 5.

***H. l. albicrissa*.—**

ECUADOR: 25.

PERÚ: 14.

***Rhodopis vesper tertia* Hellmayr**

*Rhodopis vesper tertius* HELLMAYR, 1932 (June 13), Field Mus. Nat. Hist., zool. ser., vol. 19, p. 240, footnote—Tembladera, Dept. Cajamarca, Perú; ♂; Munich Mus.

Tembladera, 4 ♂, 2 ♀.

This form is very poorly distinguishable from *atacamensis*, to which specimens from northern Perú were at one time assigned in spite of the separated positions of the ranges at the extremes of the specific range with *v. vesper* in the intervening area. According to the describer, *tertia* has a bill as heavy as that of *vesper* but much shorter, and the under parts whiter, while *atacamensis* has a bill equally short but more slender, with under parts as in *vesper*. I am unable to appreciate the distinctions in the six specimens here listed. The present Tembladera birds have the bill unquestionably shorter than in *vesper*, but it is also more slender, and the under parts are no more pronouncedly whitish than is the case in some *vesper*. Hellmayr, however, had 22 males and 14 females of his new form, and it is possible that this extensive series adequately demonstrated the characters mentioned, and until I have seen more material from the north I am unwilling to dispute the claim of *tertia* to recognition.

Records assignable to *tertia* are from Paita, Trujillo, Pacasmayo, and Piura.

### **Rhodopis vesper vesper (Lesson)**

*Ornismya Vesper* LESSON, 1829, Histoire naturelle des oiseaux-mouches, pp. xv, 85, pl. 19—"Chili, non loin de Valparaiso" (*errore*); probably near Tarapacá, Chile, but possibly western Perú; ♂; Paris Mus.

Islay, 3 ♂, 1 ♀; Arequipa, 5 ♂, 1 ♀; Cocachacra, 4 ♂, 3 ♀; Moquegua, 3 ♂, 1 ♀; Vitarte, 1 ♂; Huacho, 1 ♂; Huaral, 3 ♂, 2 ♀; Lima, 1 ♂; Pausa, 1 ♂; Perú, 2 ♂; no locality, 1 [♀].

Study of this series has brought to light no unusual data to be reported.

Peruvian records, not embraced by the material listed, are from Santa Eulalia, Chorrillos, Chihuata, and Caraveli.

### **Thaumastura cora (Lesson and Garnot)**

*Orthorhynchus Cora* LESSON AND GARNOT, 1827 (July 25), in Duperrey, Voyage . . . sur . . . la Coquille, Zoologie, pl. 31, fig. 4—no locality; in later text, between Callao and Lima, Perú; ♂; Paris Mus.

*Thaumastura cora montana* CORY, 1913 (May 31), Field Mus. Nat. Hist., ornith. ser., vol. 1, p. 286—Hacienda Llagueda northeast of Otuzco, Perú; ♂; Chicago Nat. Hist. Mus.

*T[haumastura] Cora* var. *cyanescens* SIMON, 1921, Histoire naturelle des Trochilidae, pp. 224, 395—Tulpo, Perú; ♂; Amer. Mus. Nat. Hist.

There is little variation throughout the limited range of this species. As I reported earlier (1930, Field Mus. Nat. Hist., zool. ser., vol. 17, p. 291) Cory's *montana* was proposed through lack of adequate material for comparison, and Simon's *cyanescens* was equally untenable since it was recognized by its describer as only a variant differing in some respects from other examples from the same locality that were normal *cora*.

In the series of birds now before me is a specimen from the Rothschild Collection that I take to be Simon's type of *cyanescens*. It agrees with the characters Simon noted, and was collected by Baer at Tulpo as was Simon's specimen which was said to be the only one in Baer's material with the supposed characters. Simon first commented on this specimen (1902, Novitates Zool., vol. 9, p. 183) in a report on Baer's Peruvian hummingbird collection, part of which was said to be in the Rothschild Collection and part in his own possession. There this example was relegated to the status of individual variant, and it was not until later that Simon ventured to supply a distinguishing name to it. It is bluer above than any other male at hand, but it is not fully adult and I judge its unusual coloration to be due to that cause. Another young male in even more immature condition is slightly more bluish than the adults, but not so markedly as the type of "*cyanescens*." Other young males do not show this character.

The males now before me differ among themselves in several particulars that do not lend themselves to a clear interpretation of the succession of plumages. Possibly the youngest of the four is much like adult females below, being noticeably ochraceous anteriorly and laterally but with a number of well-developed amethystine gorget feathers. The tail has the pattern of that of the females but is a little longer, while the median feathers are about 6 mm. shorter than the second pair which are equaled by the third pair as in the females. This bird was taken in November.

A May bird is equally ochraceous below, with only a single gorget plume developed. The tail shows more approach to the adult male condition, having the median rectrices only a little longer than the upper tail-coverts. One of the second pair is longer than any of the others and has a broad white tip, while the outer three pairs all have longer white tips than is shown by the females; the other second rectrix is in the sheath and is evidently the terminal part of a slender (probably elongated) feather already showing the differentiation of a dark terminal portion preceded by dark outer

web and whitish inner web as in that position in adult males. The tip of this feather is, however, narrowly but noticeably white which it is not in adults.

A January specimen differs from both the others in having the throat dull whitish with small central spots of brown and a single amethystine feather near the lower border. There is a definite whitish breast band and the flanks are washed with green (both adult characters). The tail is that of an adult male, with the three outer pairs of rectrices slender and acuminate but badly frayed, while the second rectrices are just beginning new growth, being little longer than the median ones and without more than a suggestion of pale tips.

The fourth young male is the type of "*cyanescens*" and is in nearly complete adult plumage (a little off color) with a few reminders of immature dress on the sides of the head and a certain laxness of plumage that is associated with underdevelopment. This specimen was collected in May.

In addition to the localities from which material has been examined, records are from Otusco, Chimbote, Cerro Catache, Callao, and Ica.

#### SPECIMENS EXAMINED

*T. cora*.—

PERÚ:

Hacienda Llagueda, 1 ♂<sup>1</sup> (type of *montana*);

Tulpo, 1 ♂ (type of *cyanescens*);

Callahuate, 1 ♂<sup>1</sup>;

Maynapall, 1 ♂<sup>1</sup>;

Huacho, 1 ♂;

Huaral, 1 ♂, 5 ♀;

Lima, 1 (?);

Vitarte, 2 ♀;

Matucana, 4 ♂<sup>1</sup>;

Santa Eulalia, 1 ♀<sup>1</sup>;

Chosica, 1 (?)<sup>1</sup>;

Islay, 3 ♂;

Arequipa, 1 ♂; 1 ♀;

"So. Perú," 1 [♂].

#### **Calliphlox amethystina** (Boddaert)

*Trochilus amethystinus* BODDAERT, 1783, Table des planches enluminées, p. 41—based on Daubenton, Planches enluminées, pl. 672, fig. 1; Cayenne.

<sup>1</sup> Specimens in Chicago Natural History Museum.



I have earlier (1930, Field Mus. Nat. Hist., zool. ser., vol. 17, p. 292) given a list of synonyms of this species and added comments relative to the immature male plumage and the significance of "*Catharma orthura*" in the sequence of plumages of the males. The examination of considerable additional material confirms my conclusions and has provided some additional data on both male and female plumages. With six exceptions in a series of nearly 40 birds other than adult or nearly adult males, the specimens sexed as [young] males and [adult or young] females show uniformity of distinction in several characters according to their given sex. Six examples marked as males agree entirely with 23 marked as females and may be presumed to belong to the latter sex. Eighteen non-sexed individuals may be assigned to one or the other without difficulty on the same criteria.

Young females have the tail less deeply forked than even the youngest males and somewhat shorter, also. The basal third or more of the rectrices, except of the median pair, is noticeably gray, leaving the subterminal band sharply defined both from its basal area and from the tip which, in turn, may be rufescent or whitish. (This gray basal area is a good character for distinction from some of the allied species such as *Acestrura mulsant* in which the females have considerable resemblance to females of *amethystina* but, among other distinctions, have the base of the rectrices rufescent.) Some females have a well-developed amethystine gorget (accompanied by a prominent whitish malar stripe) but others, including obviously younger individuals, have the throat speckled with dull bronzy brown. The lower under parts are usually prominently rufescent, always on the sides of the body and sometimes over nearly the whole abdomen and under tail-coverts. A few specimens are whitish over most of the under parts but still show the rufescence on the flanks.

Young males much duller below than adult or young females, being rather dull sooty, sometimes washed with faint olive and with a suggestion of rufescence on the flanks but apparently never with the pronounced rufous color of the females. The whitish breast-band is better developed than in the females but the white malar stripe less so. The tail is longer and more deeply forked than in the females but much less than in the adult males, and it is the retention of this immature tail while the rest of the plumage develops into the full adult condition that produces the "phase" that was described as "*orthura*." As a rule, the adult tail is as-

sumed early in the post-juvenile molt, and most of the immature males at hand have this change already made. The amethystine gorget begins to appear quite early, sometimes before the molt of the rectrices and sometimes after this change. The series at hand shows numerous combinations of the various stages.

I can find no consistent distinctions in the populations of the different portions of the specific range to warrant the recognition of more than one nominal form. I noted in my earlier paper (1930) that Peruvian birds then available had the bill longer than Guianan and Venezuelan specimens, and the present longer series confirms this tendency although it is not quite constant. The wing also averages longer. Two Ecuadorian males agree with the Peruvian birds in these respects, while east-Brazilian specimens are more in accord with the Guianan and Venezuelan. The measurements (in millimeters) are as follows, with the averages given in parentheses:

	WING	BILL
Perú and Ecuador	34-36 (35.0)	14.3-15.7 (15.0)
Elsewhere	30-36 (33.5)	11.9-15 (13.5)

With this overlap it appears undesirable to separate a Peruvian form. Color characters are variable and equally unsatisfactory.

Of interest are three "Bogotá" trade-skins, originally in Tring Museum, that somehow appear to have escaped being recorded, although they are the only evidence of the probable occurrence of this species in Colombia. Of less certain source is a specimen labeled "Trinidad" without other contributory data and hence of questionable origin. There are no authentic records from Trinidad.

Peruvian records are from Chayavitas, Idma, and Río Cosireni, as well as from La Merced and Vista Alegre, from which material has been examined.

#### SPECIMENS EXAMINED

##### *C. amethystina*.—

###### CAYENNE:

Cayenne, 2 ♂, 4 [♂] (including two cotypes), 1 ♀.

###### BRITISH GUIANA:

Annai, 1 [♂], 2 ♀.

###### VENEZUELA:

(Roraima, Sacupana, Suapure, Caicara, Auyan-tepui, Mt. Duida, San Félix, and Mérida), 7 ♂, 3 [♂], 6 ♀, 3 [♀].

###### COLOMBIA:

"Bogotá," 3 [♂].

## BRAZIL:

(Mocajuba, Prata [Pará], Miritiba, Ilha São Luiz [Maranhão], Roça Nova, Corvo [Paraná], Patos, Bello Horizonte [Piauí], "Baía," "Rio," Monte Serrat [Rio de Janeiro], Minas Gerais, São Francisco de Paula [Rio Grande do Sul], Chapada, Descalvados, Belvedere de Urucum [Mato Grosso], and "Brazil"), 18 ♂, 6 [♂], 11 ♀, 8 [♀].

## ECUADOR:

Zamora, 2 [♂], 1 ♀, 1 [♀];

"Pogio" (*errore*), 3 [♀].

## PERÚ:

Mouth of Río Curaray, 2 ♂, 1 ♀;

mouth of Río Santiago, 1 ♀;

Pomará, 1 ♀;

Río Negro, near Moyobamba, 4 ♂;

Río Seco, 1 ♂;

La Merced, 1 ♂;

Santa Rosa, Río Ucayali, 1 ♀;

Vista Alegre, 2 ♂<sup>1</sup>.

**Myrtis fanny fanny** (Lesson)

*Ornismya Fanny* LESSON, 1838, Ann. Sci. Nat. Zool., ser. 2, vol. 9, p. 170—"Mexique"; *errore*, I suggest Lima, Perú.

*Ornismya Labrador* BOURCIER, 1839 (March), Ann. Sci. Phys. Nat., Soc. Roy. d'Agr. Lyon, vol. 2, p. 389—"Mexique"; *errore*; cotypes in Amer. Mus. Nat. Hist. are labeled "Pérou" and I suggest Lima as restricted type locality.

*Thaumastura francesiae* SCLATER, 1862, Catalogue of American birds, p. 299—*nomen emend.*

*M[yrtis] Franciscæ* HEINE, 1863, Jour. f. Ornith., vol. 11, p. 208—*nomen emend.*

*Myrtis fanniae* SCLATER, 1858 Proc. Zool. Soc. London, vol. 16, p. 459—*nomen emend.*

In a series of over a hundred specimens of this species, there is relative uniformity in dimensions except for 15 examples from the Marañón Valley of northern Perú. These have the wing somewhat longer, on average, and the tail more noticeably so, and in view of the almost complete constancy of the latter measurement, subspecific separation is proposed hereunder.

There is a possibility that north-Ecuadorian birds may prove to be separable by reason of a minimum development of ochraceous color on the sides and flanks in the adult males. Some examples have very little of this but are matched by some Peruvian skins, while other Ecuadorian birds have an appreciable amount, even (judging by one trade-skin) invading the sides of the breast on occasion. More material with exact locality in Ecuador is needed

<sup>1</sup> Specimens in Chicago Natural History Museum.

to confirm the possibility of distinction. Measurements are those of *fanny fanny* or, perhaps, slightly smaller on average; males have the tail 28.5–31; females, 23–24.

Some variability has been noted in the immature plumages that may be worth description. Young males are at hand in which the general plumage is about like that of the adult female although duller in tone, with dusky dots on the throat, and with the feathering loose and not so firm in texture as in adult birds. The tail, however, is that of the male, with the rectrices all dark, quite slender, and incurved, with the median pair concealed under the upper tail-coverts. Other young examples, also sexed as males, resemble the females even more, having the tail with the rectrices broad and the outer three pairs broadly tipped with white and provided with rufescent bases, while the median feathers are broad, shining green (as in adult females), and only a little shorter than the submedian pair although usually a little shorter than the corresponding feathers in the adult females. These median rectrices in the young males are, however, rather stiffer than the same feathers of the females. One unusual example has one of the two median rectrices about half the length of the other and somewhat narrowed, being almost as long as the longest upper tail-covert. It does not indicate the transition between the modified female tail and the male tail, and it is still not clear in what stage of molt the change is effected.

One other interesting specimen, sexed as a female, has the plumage of adult texture and the colors bright. The tail has the female pattern of coloration, but the feathers are all unusually stiffened and narrower than in adult females though decidedly broader than in adult males. I judge it to be an "advanced" female.

The distribution of *fanny fanny* is somewhat unusual. It ranges down the eastern side of the Eastern Andes of Ecuador to the continuation of that range in the Central Andes of northern Perú, in the Chachapoyas region. Thence it crosses the Marañón westward to the Huancabamba region and across the Western Andes to the coastal side, ranging down the whole coastal area from that point almost to the Chilean border. It would not be surprising to find some distinctions between coastal birds and those from the Central Andes of the Chachapoyas region, but none is clearly evident. Several adult males from Chachapoyas have the back more strongly and deeply bronzy than any of the

others, being approached closest by the Ecuadorian series while the coastal birds have the dorsum clearer green. However, a male from San Pedro, very close to Chachapoyas, is like the coastal birds (as are several Ecuadorian examples) and a young male from "Guayabamba" [= Huayabamba, upper Río Huambo] also is green-backed. Females do not show any suggestion of geographical segregation in this respect, although they are variable.

A specimen at hand labeled "Tinta" is questionable as to locality of origin. It was collected by Whitely but bears no other data except the notation that it is the specimen figured by Elliot on page 126, figure 73 of his "Synopsis of the Trochilidae." Whitely collected several other specimens among those in the material at hand (four from Islay, one from Catarindos Valley, and two without other locality than "Peru"). There is no other evidence of the occurrence of *Myrtis fanny* away from the coast in the latitude of Tinta, and I suspect this example probably came from the neighborhood of Islay where most of the others were found. The species is not listed in Sclater and Salvin's report on Whitely's Tinta collections.

Records of *fanny*, other than those duplicated in the material examined, are from Chota, Trujillo, Callacate, Chirimoto, Aullan, Cascas, Ica, Pausa, and Coracora.

### ***Myrtis fanny megalura*, new subspecies**

TYPE: From Malca, Cajabamba, Perú; altitude 8000 feet. No. 484532, American Museum of Natural History. Adult male collected April 13, 1894, by O. T. Baron.

DIAGNOSIS: Similar to *M. f. fanny* of the coastal region of Perú but tail longer.

RANGE: Cajabamba region of northern Perú in the Western Andes of southern Cajamarca, crossing to the western side of the Central Andes in southeastern La Libertad and extreme northwestern Huánuco.

DESCRIPTION OF TYPE: Top of head dull Brownish Olive, with narrow lighter margins; back bright, shining Old Gold, with worn parts of the plumage changing to bluish green in certain positions; upper tail-coverts greener and less golden than the back. Gorget Venice Green × Benzol Green, with a tiny spot of the same color on each side of the forehead; below the gorget a band of brilliant Purple, not reaching the full width of the gorget; breast and sides

white or whitish, extending around the latero-posterior corners of the gorget and narrowing into a superciliary line that reaches but does not pass over the orbit; mid-belly and under tail-coverts white; flanks deep Cinnamon-Buff, becoming paler and more ochraceous anteriorly and on the posterior part of the whitish sides. Remiges near Deep Slaty Brown; greater upper wing-coverts similar; remaining upper coverts green; under wing-coverts sooty olive, with a fine whitish line along carpal margin. Tail sooty blackish, with a greenish tinge on the median and sub-median feathers, particularly strong on the inner webs of the sub-median feathers. Bill (in dried skin) black; feet blackish brown. Wing, 42.5 mm.; tail, 35; culmen (exposed), 17; tarsus, 5.

REMARKS: Females are likewise longer-tailed than the same sex of *fanny* and have the cinnamomeous color of the under parts somewhat paler.

The measurements on which the distinction of *megalaria* is based are as follows. Eight adult males have the wing 41-43 mm. (average, 41.8); tail, 32.2-35 (average, 33.8). Fifteen males from other parts of Perú: wing, 39-42 (average, 40.6); tail, 31-33 (average, 31.6). Of the females, five of *megalaria* have the wing 44.5-46 (average, 45.4); tail, 26-27 (average, 26.5). Fourteen other Peruvian females have the wing 41.5-44.5 (average, 42.8); tail, 23-26 (average, 24.5). Actually, only one male of *megalaria* and one of *fanny* overlap in length of tail, although three of *megalaria* and two of *fanny* do so in length of wing. Similarly, only one female of each falls within the zone of overlap in length of tail, but two of *megalaria* and three of *fanny* do so in the wing length. The tail measurement thus appears to be the more constant distinguishing feature of the two dimensions. The bill shows no differentiation.

A record from Cajamarca undoubtedly belongs to *megalaria*.

It is probable that *megalaria* occupies higher elevations in the Andes than most of the population of *fanny*. The elevations represented in the material examined are from 6600 feet (Hacienda Limón) to 10,400 feet (Cullcui), while *fanny* ranges from sea level up to "8600-9400 feet" (San Pedro), or even 9000 (Obrajillo). The ranges are, however, geographically rather than altitudinally distinct.

#### SPECIMENS EXAMINED

*M. f. fanny*.—

ECUADOR:

(Tumbaco, Valle Tumbaco, Loja, Loja or Cuenca, Zamora, Sabanilla,

Lunamá, north of Quito, "Quito," and "Ecuador"), 9 ♂, 5 [♂], 1 "♀" [= ♂], 3 ♀, 1 [♀].

## PERÚ:

Chachapoyas, 3 ♂, 2 ♀, 1 ♀<sup>1</sup>;  
 San Pedro, 1 ♂;  
 "Guayabamba" [= Huayabamba Valley], 1 ♂;  
 Huancabamba, 5 ♂, 4 ♀;  
 San Felipe, 2 ♂, 1 ♀;  
 Sondorillo, 1 [♂];  
 Palambla, 1 "♀" [= ♂];  
 Obrajillo, 1 ♀<sup>2</sup>;  
 Samné, 1 ♂<sup>2</sup>, 1 ♀<sup>2</sup>;  
 Yuramarca, 1 ♂<sup>2</sup>;  
 Macate, 1 ♂<sup>1</sup>, 3 ♀<sup>1</sup>;  
 Trujillo, 1 ♀<sup>1</sup>;  
 Huacho, 1 ♂;  
 Vitarte, 1 ♀;  
 Lima, 1 ♀;  
 Chosica, 1 ♀<sup>1</sup>;  
 Cocachacra, 1 ♂, 2 ♀;  
 Ilo, 1 ♀;  
 Islay, 3 ♂, 1 ♀;  
 "Tinta" [? = near Islay], 1 ♂;  
 Catarindos Valley, 1 ♂;  
 Muchica (Muchiq), 1 ♂<sup>2</sup>;  
 Nazca, 1 ♂<sup>2</sup>, 1 [♂]<sup>2</sup>;  
 Huancano 2 ♂<sup>2</sup>, 1 [♂]<sup>2</sup>, 1 ♀<sup>2</sup>;  
 La Punta, Tambo Valley, 1 ♂<sup>2</sup>;  
 "Perú," 2 ♂, 3 ♀ (including 1 ♂, 1 ♀ cotypes of "*labrador*").

No LOCALITY: 4 [♂].

*M. f. megalura*.—

## PERÚ:

Malca, 1 ♂ (type), 2 ♀;  
 Chusgón, 1 ♂;  
 Huaylillas, 1 ♂;  
 Cajabamba, 1 ♂, 1 ♂<sup>2</sup>, 1 ♀<sup>2</sup>;  
 Hacienda Limón, 2 ♀<sup>2</sup>;  
 Soquián, 1 ♀<sup>2</sup>;  
 Quiches, 1 ♂<sup>2</sup>;  
 Cochabamba [near Tayabamba], Dept. Libertad, 1 ♂<sup>2</sup>, 1 ♀<sup>2</sup>;  
 Cullcui, 1 ♂<sup>1</sup>.

### *Myrmia micrura* (Gould)

*Calothorax micrurus* GOULD, 1854 (May), Monograph of the Trochilidae, vol. 3 (pt. 7), pl. 148 and text—"Interior" of Perú [= northwestern coastal region]; I suggest Trujillo, Perú.

<sup>1</sup> Specimens in Chicago Natural History Museum.

<sup>2</sup> Specimens in Academy of Natural Sciences of Philadelphia.

This species is limited to the coastal area of northwestern Perú and southwestern Ecuador. No differences are apparent in material from the various localities. Young males resemble the females in most particulars but have the median rectrices more slender and acute at tips, with a slight emargination distally, while the same feathers of the females are broader and more evenly rounded or at least not sharply pointed.

Peruvian records are from Tumbes, Payta, Paucal, and "Chyion" [= Chepen].

#### SPECIMENS EXAMINED

*M. micrura*.—

##### ECUADOR:

Isla La Plata, 2 ♂, 1 "♀?" [= ♂];  
 Daule, 1 [♀];  
 Guayaquil, 1 [♂], 1 "♂?" [= ♀];  
 Durán, 1 ♂;  
 Santa Rosa, 1 [♂];  
 Santa Elena, 2 "♂" [= ♀].

##### PERÚ:

Tembladera, 1 ♂, 1 ♀;  
 Trujillo, 6 ♂, 2 ♀;  
 Grau, 1 ♂;  
 Pílares, 1 ♀;  
 Lamor, 1 ♂.

#### *Acestrura mulsant* (Bourcier)

*Ornismya Mulsant* BOURCIER, 1842 (after Dec. 21), Rev. Zool., vol. 5, p. 373—Colombia; also Bolivia; I suggest Bogotá region of Colombia.

*Ornismya Mulsanti* BOURCIER, "1842" [= after Jan. 27, 1843], Ann. Sci. Phys. Nat., Soc. Roy. d'Agr. Lyon, vol. 5, p. 344, pl. 20—Colombia.

No significant variation is apparent in the birds throughout the range from Colombia to northern Bolivia. The species appears to be most common in Ecuador and northern Perú, judging by the material I have seen. Peruvian records are from Cutervo, Tambillo, Callacate, Chirimoto, Tamiapampa, Garita del Sol, Huiro, and Huaisampillo. The specimens in the British Museum recorded by Sclater (1892, Catalogue of birds in the British Museum, vol. 16, p. 407) as from Pebas, Perú, are very doubtful as to either identity or locality. Pebas is at too low an elevation to be the home of *mulsant* which ranges from about 5000 feet upward.

It appears to be necessary to use the name *mulsant* in preference to *mulsanti*, since it has some priority in its favor. The second



account in the Lyon paper must have appeared not earlier than January 27, 1843, since another article in the same signature of the journal is said to have been read at a meeting of the society on that date. The latest date of similar use in the *Revue Zoologique* is December 21, 1842.

[*Acestrura heliodor* has been recorded from "Peru" (Cabanis and Heine, 1860, *Museum Heineanum*, pt. 3, p. 60) but without exact locality. Since there is no confirmation of the occurrence of this species in Perú, either the specimens may be presumed to have been misidentified or the locality "Peru" is in error.]

#### SPECIMENS EXAMINED

##### *A. mulsant.*—

##### COLOMBIA:

Santa Elena, 1 [♀];  
 Antioquia, 1 [♂], 1 [♀];  
 "Bogotá," 16 [♂], 7 [♀].

##### ECUADOR:

(Valle Cumbaya, Valle Tumbaco, near Poggio, Ibarra, Nanegal, Paramba, Alamor, Sabanilla, Baeza, Zamora, Río Oyacachi below Chaco, Río Napo, "Quito," and "Ecuador"), 14 ♂, 5 ♀, 1 "♀" [= ♂].

##### PERÚ:

Taulis, 2 ♂;  
 Chugur, 2 ♂;  
 La Lejia, 3 ♂, 1 ♀;  
 Uchco, 2 ♀;  
 San Pedro, 1 ♀;  
 "Guayabamba" [Huayabamba Valley], 1 ♂, 2 ♀;  
 Nuevo Loreto, 1 [♀];  
 Cushi Libertad, 1 ♂;  
 Ninabamba, 1 ♂;  
 Utcuyacu, 1 ♂;  
 Chinchao, 1 ♂<sup>1</sup>, 2 ♀<sup>1</sup>.

#### *Acestrura bombus* (Gould)

*Chaetocercus bombus* GOULD, "1870" [=1871], *Proc. Zool. Soc. London*, p. 804—Citado, Ecuador; ♂♂, ♀♀ cotypes in British Mus.

No distinctions have been found in birds from the different parts of the range. In addition, I have been unable to find good characters for distinguishing young males from females, unless the former have developed some of the glittering gorget feathers or assumed the characteristic tail of the adult male plumage.

<sup>1</sup> Specimens in Chicago Natural History Museum.

Peruvian records from localities not included in the list of material examined are from Tambillo, Callacate, Chirimoto, Succha, and Tamiapampa.

#### SPECIMENS EXAMINED

*A. bombus*.—

ECUADOR:

(Esmeraldas, Chone, Río Pescado or Pogio, between Chimborazo and Chimbo, Chimbo, Durán, Quito, Guainche, Sabanilla, Alamor, Río Napo, below San José, Zamora, "Quito-skins"), 16 ♂, 7 [♂], 5 ♀, 1 [♀], 2 (?); (Citado, and between Chimborazo and Chimbo), 1 ♂, 1 ♀, 1 ♂<sup>1</sup>, 1 ♀<sup>1</sup>.

PERÚ:

San Pedro, 1 ♂;

Uchco, 1 ♀;

Huarandosa, 1 [♂], 1 ♀, 1 [♀], 2 (?);

San Ignacio, 1 ♀;

Seques, 2 ♀;

Guayabamba [Huayabamba Valley], 1 ♀;

Muña, 1 (?);

Chinchao, 1 ♀<sup>1</sup>.

[*Eulidia yarrellii* (Bourcier) has been recorded from Perú but apparently in error. Whitely (1873, Proc. Zool. Soc. London, p. 187) includes it in his brief paper as having been secured at Huaisampillo, but his description leaves no doubt that he had a specimen of *Acestrura mulsant*. Various other records cite localities such as Arica and Cobija which show the actual origin to have been outside the bounds of modern Perú.]

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<sup>1</sup> Specimens in Chicago Natural History Museum.